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TRANSMITTAL LETTER TO THE UNITED STATES **DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371**

ATTORNEY'S DOCKET NUMBER 428.1052

INTERNATIONAL APPLICATION NO. PCT/KR2004/000309

INTERNATIONAL FILING DATE 16 February 2004

PRIORITY DATE CLAIMED 16 December 2003

TITLE OF INVENTION

MULTI-LAYERED PHOTOBIOREACTOR AND METHOD OF CULTURING PHOTOSYNTHETIC MICROORGANISMS USING THE SAME

LEE, Choul-Gyun; SUH, In Soo and JOO, Hyun-Na							
Apr	lican	t herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:					
1.	\boxtimes	This is a FIRST submission of items concerning a submission under 35 U.S.C. 371.					
2.		This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371.					
3.	×	This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must incluitems (5), (6), (9) and (21) indicated below.					
4.	\boxtimes	The US has been elected (Article 31).					
5.	\boxtimes	A copy of the International Application as filed (35 U.S.C. 371 (c)(2))					
	a.	is attached hereto (required only if not communicated by the International Bureau).					
	b.	🖾 has been communicated by the International Bureau.					
	c.	is not required, as the application was filed in the United States Receiving Office (RO/US).					
6.		An English language translation of the International Application as filed (35 U.S.C.					
	a.	is attached hereto.					
	b.	☐ has been previously submitted under 35 U.S.C. 154(d)(4).					
7.	×	Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))					
	a.	are attached hereto (required only if not communicated by the International Bureau).					
	b.	☐ have been communicated by the International Bureau.					
	C.	☐ have not been made; however, the time limit for making such amendments has NOT expired.					
	d.						
8.		An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).					
9.	\boxtimes	An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).					
10	. 🗆	An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).					
Items 11 to 20 below concern document(s) or information included:							
11. 🛭		An Information Disclosure Statement under 37 CFR 1.97 and 1.98.					
12	. 🛛	An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.					
13	. 🖾	A preliminary amendment.					
14	. 🗆	An application Data Sheet under 37 CFR 1.76.					
15	. 🗆	A substitute specification.					
16	. 🗆	A power of attorney and/or change of address letter.					
17	. 🗆	A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825.					
18	. 🗆	A second copy of the published International Application under 35 U.S.C. 154(d)(4).					
19	. 🗆	A second copy of the English language translation of the International Application under 35 U.S.C. 154(d)(4).					
20). 🛭	Other items or information: Acknowledgment Postcard					

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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JJ.S. APPLICATION NO. (if known, see 37 CFR ATTORNEY'S DOCKET NUMBER INTERNATIONAL APPLICATION NO. PCT/KR2004/000309 428,1052 CALCULATIONS PTO USE ONLY The following fees are submitted: 21. \$300.00 \$300 Examination fee If International preliminary examination report prepared by USPTO and all claims satisfy provisions of PCT Article 33(1)-(4)......\$100 \$200.00 Search fee Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the International Search Report prepared and provided to the Office \$400 \$500.00 All other situations. . TOTAL OF 21, 22 and 23 = \$1,000.00 Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof. RATE Extra Sheets Number of each additional 50 or **Total Sheets** fraction thereof (round up to a whole \$ - 100 = /50 = \$250.00 \$0.00 Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(h)). \$ RATE **NUMBER FILED** NUMBER EXTRA CLAIMS Total claims 0 - 20 = \$50.00 \$0.00 \$ Independent claims 0 1 - 3 = \$200.00 \$0.00 \$ х \$360.00 Multiple Dependent Claims (if applicable) X + \$360.00 \$ \$ \$1,360.00 TOTAL OF ABOVE CALCULATIONS Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are \$ \$680.00 reduced by 1/2. \$680.00 SUBTOTAL \$ Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)). \$ \$ \$680.00 TOTAL NATIONAL FEE Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per \$40.00 \$ \$720.00 **TOTAL FEES ENCLOSED =** S Amount to be \$ refunded: Amount to be \$ charged: a. A check in the amount of to cover the above fees is enclosed. to cover the above fees. b. Please charge my Deposit Account in the amount of A duplicate copy of this sheet is enclosed. c. 🛮 The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 02-2275 . A duplicate copy of this sheet is enclosed. d. X Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038. NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status. SEND ALL CORRESPONDENCE TO: Michael N. Mercanti MUSERLIAN, LUCAS & MERCANTI, LLP 475 Park Avenue South New York, New York 10016 Michael N. Mercanti Phone: 212-661-8000 Fax: 212-661-8002 NAME 33,966 **REGISTRATION NUMBER**

JC06 Rec'd PCT/PTO 17 MAY 2005

		7001100 (A WAY ZUUT			
CERTIFICATE O		ket No.					
Applicant(s): LEE, CI	ioui-Gyun, et al.	428.1052					
Application No.	Filing Date	Examiner	Customer No.	Group Art Unit			
To be assigned	Herewith	Unknown	20311	Unknown			
Invention: MULTI-L MICROO	AYERED PHOTOBIORE RGANISMS USING THE	ACTOR AND METHOD OF CULTU SAME	RING PHOTOSY	NTHETIC			
I hereby certify that the following correspondence: Specification (49 pages) and Figures (16 pages)							
	(Identify type of correspondence)						
is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37							
CFR 1.10 in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450							
on	·						
	May 17, 2005						
	(Date)						
Carla Santos							
(Typed or Printed Name of Person Matting Correspondence)							
		(Signature of Person Mai	ling Correspondence)	\supset			
		EV 568 916 068 US					
("Express Mail" Mailing Label Number)							
	Note: Each par	er must have its own certificate of mailing					

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CERTIFICATE OF MAILING BY XPRESS MAIL" (37 CFR 1.10) Applicant(s): LEE, Choul-Gyun, et al. Group Art Unit Customer No. Application No. Filing Date Examiner To be assigned Herewith Unknown 20311 Unknown MULTI-LAYERED PHOTOBIOREACTOR AND METHOD OF CULTURING PHOTOSYNTHETIC Invention: MICROORGANISMS USING THE SAME I hereby certify that the following correspondence: PTO-1390 Form (2 pages, page 2 in duplicate) (Identify type of correspondence) is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on May 17, 2005 (Date) Carla Santos (Typed or Printed Name of Person Matting Correspondence) (Signature of Person Mailing Correspondence) EV 568 916 068 US ("Express Mail" Mailing Label Number)

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